Virginia Title V Operating Permit

Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: **Stanley Furniture Co.**

Facility Name: Stanley Furniture Co., Stanleytown Plant 1401 Fairystone Park Hwy., Stanleytown, VA

Registration No.: 30320

AIRS ID: **51-089-0037** Permit Number: **VA-30320**

July 1, 2003 Effective Date

July 1, 2008

Expiration Date

May 19, 2003

Robert G. Burnley

Director, Department of Environmental Quality

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I. **Facility Information**

Permittee

Stanley Furniture Co. P.O. Box 30 Stanleytown, VA 24168

Facility

Stanley Furniture Co., Stanleytown Plant 1401 Fairystone Park Hwy. Stanleytown, VA

Registration Number: 30320

AIRS Identification Number: 51-089-0037

Facility Description: SIC Code 2511, wood household furniture. -

This plant manufactures a wide variety of conventional wood household furniture. It is located at 1401 Fairystone Park Highway in Stanleytown in Henry County. The plant receives and dries rough sawn lumber, mostly hardwoods, performs various woodworking and furniture assembly operations, and finishes the assembled furniture primarily with stains and lacquer. Finishes applied are primarily NESHAP (MACT) compliant VOC-based wood furniture coatings. Spraying is the primary application method.

All wood dust emission sources are controlled by either baghouse filters, or closed loop cyclones without emissions.

Process and space heat for the facility are provided by three (3) facility boilers. FB1 is a 37.0 million Btu/hr rated input capacity Erie City boiler burning wood as the primary fuel, with distillate (No. 2) fuel oil backup fuel. FB2 is a 110.0 million Btu/hr rated input capacity Union Iron Works boiler burning wood as the primary fuel, with coal as the backup fuel. FB3 is a small 8.46 million Btu/hr rated input capacity Hurst package boiler burning only distillate (No. 2) fuel oil. Most of the plant's heat is supplied by burning dry hogged and finer wood fuel from Stanley's wood furniture processes. This fuel is fed pneumatically from the enclosed wood fuel storage silo. Excess summer wood fuel is saved for use in the winter by storage in a semienclosed building designed for this purpose.

Responsible Official

Mr. Robert J. Smith Sr. Vice President Operations

Contact person

Mr. David P. Maddox Director, Environmental Engineering 276-627-2000 (or 2260)

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II. Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	P.D. ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equ	ipment						
EU-FB (Fuel Boilers) (FB1, FB2, FB3).	FB1	FB1, pre-1967 Erie City type 4C-28 boiler. Wood fuel, backup is distillate (No. 2) fuel oil. Not NSPS Dc, because constructed before 1989.	37.0 million Btu/hr input rated capacity (2.5 tph wood fuel @ 7500 Btu/lb, or 270 gal/hr No. 2 fuel oil).	NA	NA	NA	NA
"	FB2	FB2, 1967 Union Iron Works type VO boiler. Wood fuel, backup is coal. Not NSPS Db, because constructed before 1984.	110.0 million Btu/hr input rated capacity (7.3 ton/hr wood fuel @ 7500 Btu/lb, 4.2 tons/hr coal at 13,000 Btu/lb).	NA	NA	NA	NA
11	FB3	FB3, 1990 Hurst boiler. No. 2 fuel oil is the only fuel. Not NSPS Dc, because smaller than 10 million Btu/hr rated capacity.	8.46 million Btu/hr input rated capacity (62 gal/hr).	NA	NA	NA	NA

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Emission V	Unit ID	Stack ID	Emission Unit Description	on	Size/Rated	Capacity*	Pollution Control Device Description (PCD)		P.D. ID	Pollutant Controlled	Applicable Permit Date
Woodwor	king Equ	uipment									
EU- WDS		WOODWORKING: all woodworking equipment, including hogging and material transfers, all woodworking dust collection systems. Includes (a) 22 main fabric filters on existing wood dust air handling systems, plus (b) 3 main fabric filters BF1-3, BF5-2 and BF5-3 on NSR permitted wood dust air handling systems.			main baghouses a particulate emissi including all woo hogging and mate	lones w/o emissions, 25 fabric filter the wood ons to atmosphere dworking equipment, erial transfers, all st collection systems.	NA	P	M/PM-10	9-21-93 (BF1-3), 1-14-00 (BF5-2), 6-8-01 (BF5-3).	
Furniture	Finishin	g Equipment			<u> </u>	1		ı		1	
EU-F	F1	All FINISHING operations other than F2 (plant 2) finishing operations. Includes plants 1, 3, 4, and 5. Includes 38 finishing spray booths and related facilities, including various ovens, and 6 washoff tanks. The wood furniture manufacturing MACT applies (40 CFR 63 Subpart JJ).				r curtains, water down s, spray booth dry filters, l equivalent.	NA	P	M/PM-10	NA.	
n	F2	All F2 (plant 2) FINISHING operations. Includes 11 finishing spray booths and related facilities. Includes a community oven. The wood furniture manufacturing MACT applies (40 CFR 63 Subpart JJ).			NA		r curtains, spray booth Q approved equivalent.	NA	P	M/PM-10	5-19-99 PSD permit amended/reissued 7-29-02.
Contact A	dhesive	Operation									
Con-Adh	Con- Adh				NA		r curtains, spray booth Q approved equivalent.	NA	P	M/PM-10	NA
Lumber I	Orying K	ilns									
EU-DK	NA	Lumber Drying drying kilns con	Kilns: All 13 lumber nbined.	1,905,000 Approx. 35		RD FT/yr throughp	NA ut.	NA	N	A A	NA

^{*}The Size/Rated capacity [and PCD efficiency] is provided for informational purposes only, and is not an applicable requirement.

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III. Fuel Burning Equipment Requirements - Fuel Boilers (EU-FB; FB1, FB2, FB3)

The following describes the plant's boilers:

Boiler		Input Capacity	Fuel
		Million Btu/hr	
FB1:	pre-1967 Erie City	37.0	wood fuel; distillate
			(No. 2) fuel oil backup.
FB2:	1967 Union Iron Works	110.0	wood fuel, coal backup
FB3:	1990 Hurst	8.46	distillate (No. 2) fuel
			oil only.

<u>Boiler FB1; pre-1967 Erie City type 4C-28; wood fuel/ backup distillate (No. 2) fuel oil; 37.0</u> million Btu/hr input rated capacity (2.5 tons/hr wood fuel @ 7500 Btu/lb, 270 gal/hr fuel oil @ 137,000 Btu/gal). Wood is the primary fuel. No NSR permit is applicable. NSPS Dc is not applicable due to construction before 1989.

Boiler FB2; 1967 Union Iron Works type VO; wood fuel/ backup coal; 110.0 million Btu/hr input rated capacity (7.3 tons/hr wood fuel @ 7500 Btu/lb, 4.2 tons/hr coal @ 13,000 Btu/lb). Wood is the primary fuel. No NSR permit is applicable. NSPS Db is not applicable due to construction before 1984.

Boiler FB3; 1990 Hurst package boiler; distillate (No. 2) fuel oil only; 8.46 million Btu/hr input rated capacity (62 gal/hr distillate [No. 2] fuel oil @ 137,000 Btu/gal). No NSR permit is applicable. NSPS Dc is not applicable due to rated capacity less than 10 million Btu/hr.

A. **Limitations** - Fuel Boilers (EU-FB)

- Particulate emissions from the Erie City boiler FB1 shall be controlled by a multicyclone flyash collector without flyash reinjection (reinjection is acceptable from boiler drums and boiler ash hoppers, and is acceptable from any fallout/settling chamber or cyclone precleaner or equivalent before a multicyclone flyash collector).
 (9 VAC 5-80-110, 9 VAC 5-20-160, 9 VAC 5-40-20)
- 2. Particulate emissions from the Union Iron Works boiler FB2 shall be controlled by a multicyclone flyash collector without flyash reinjection (reinjection is acceptable from boiler drums and boiler ash hoppers, and is acceptable from any fallout/settling chamber or cyclone pre-cleaner or equivalent before a multicyclone flyash collector). (9 VAC 5-80-110, 9 VAC 5-20-160, 9 VAC 5-40-20)
- 3. The approved fuels for the Erie City boiler FB1 are wood fuel and distillate (No. 2) fuel oil. The wood fuel shall be dry and hogged or smaller as fed to the boiler. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 "Standard Specification for Fuel Oils". A change from these fuels may require a permit to modify and operate. (9 VAC 5-80-110, 9 VAC 5-20-160, 9 VAC 5-170-160)

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4. The approved fuels for the Union Iron Works boiler FB2 are wood fuel and coal. The wood fuel shall be dry and hogged or smaller as fed to the boiler. A change from these fuels may require a permit to modify and operate.

(9 VAC 5-80-110, 9 VAC 5-20-160, 9 VAC 5-170-160)

- 5. The approved fuel for the Hurst boiler FB3 is distillate (No. 2) fuel oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 "Standard Specification for Fuel Oils". A change from this fuel may require a permit to modify and operate. (9 VAC 5-80-110, 9 VAC 5-20-160, 9 VAC 5-170-160)
- 6. Emissions from the operation of the Erie City wood/distillate (No. 2) fuel oil boiler FB1 shall not exceed the limits specified below:

Particulate Matter 0.30 lbs/million Btu input
PM-10 0.30 lbs/million Btu input

Sulfur Dioxide * lbs/million Btu input hourly emission rate

* The SO₂ emission limits in "lbs/million Btu input hourly emission rate" shall be *the actual (relatively clean) amounts resulting from this boiler burning wood fuel and/or fuel oil* meeting ASTM specifications for distillate (No. 1 and No. 2) fuel oil.

(9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-40-900A1, 9 VAC 5-40-930A1)

7. Emissions from the operation of the Union Iron Works wood/coal boiler FB2 shall not exceed the limits specified below:

Particulate Matter 0.30 lbs/million Btu input
PM-10 0.30 lbs/million Btu input

Sulfur Dioxide 2.64 lbs/million Btu input hourly emission rate

(9 VAC 5-80-110, 9 VAC 5-170-160, 9 VAC 5-40-900A1, 9 VAC 5-40-930A1)

8. Emissions from the operation of the Hurst distillate (No. 2) fuel oil boiler FB3 shall not exceed the limits specified below:

Particulate Matter * lbs/million Btu input

PM-10 * lbs/million Btu input

Sulfur Dioxide * lbs/million Btu input hourly emission rate

* The particulate and SO2 emission limits in "lbs/million Btu input" and "lbs/million Btu input hourly emission rate" respectively shall be *the actual (relatively clean) amounts resulting from this boiler burning fuel oil* meeting ASTM specifications for distillate (No. 1 and No. 2) fuel oil.

(9 VAC 5-80-110, 9 VAC 5-20-160, 9 VAC 5-170-160, 9 VAC 5-40-900A1, 9 VAC 5-40-930A1)

- 9. Visible emissions from the Erie City boiler FB1 and the Union Iron Works boiler FB2 shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60 percent opacity (9 VAC 5-80-110, 9 VAC 5-40-940)
- 10. Visible emissions from the Hurst boiler FB3 shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity. This opacity limitation shall apply to this 1990 boiler at all times except during periods of startup, shutdown, and malfunction. (9 VAC 5-80-110, 9 VAC 5-50-20 A 3, 9 VAC 5-50-80)

B. Monitoring/Operation & Maintenance/Recordkeeping - Fuel Boilers (EU-FB)

Also see the Recordkeeping and Reporting sections for this Emissions Unit group and under the General Conditions below. (9 VAC 5-80-110)

- 1. <u>Visible Emissions Monitoring</u> At least once per week an observation for the presence of visible emissions from each operating boiler shall be made. If visible emissions are observed, the permittee shall:
 - a. take timely corrective action such that the boiler resumes operation with no visible emissions, or,
 - b. perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the boiler stack does not exceed 20 percent opacity. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed 20 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the boiler resumes operation with visible emissions of 20 percent or less.

The permittee shall maintain a boiler observation log to demonstrate compliance. The log shall identify the emissions point and include the date and time of the observations, whether or not there were visible emissions, any VEE recordings, and any necessary corrective action.

(9 VAC 5-80-110E)

2. <u>Operation and Maintenance Procedures</u> - The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to the boilers and related air pollution control equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance for the boilers.
- b. Develop an inspection schedule, monthly at a minimum, to insure the operational integrity of the boilers and maintain records of inspection results.
- c. Have available written operating procedures for the boilers. These procedures shall be based on the manufacturer's recommendations, at a minimum, if such recommendations exist.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.
- e. Maintain an inventory of spare parts that are needed to minimize the duration of air pollution control equipment breakdowns.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9 VAC 5-80-110, 9 VAC 5-80-110 F & K, 9 VAC 5-40-20 E)

C. Additional Recordkeeping - Fuel Boilers (EU-FB)

Also see Facility Wide Conditions and recordkeeping under the General Conditions below.

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, West Central Regional Office. These records shall include, but are not limited to:

- 1. <u>Distillate oil</u>: The permittee shall obtain and maintain records of a certification, or alternative statement, from the fuel supplier covering each shipment of distillate oil. Each fuel supplier certification or alternative statement shall include the following:
 - a. The name of the fuel supplier,
 - b. The date on which the oil was received,
 - c. The amount of distillate oil delivered in the shipment,
 - d. A statement that the oil complies with the American Society for Testing and Materials (ASTM) specifications for fuel oil numbers 1 or 2, and
 - e. The sulfur content of the oil.

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- 2. <u>Coal</u>: The permittee shall obtain for records a certification, or alternative statement since NSPS is not applicable to this boiler, from the fuel supplier covering each shipment of coal. Each coal supplier certification or alternative statement shall include the following: the name of the fuel supplier, date and tons of shipment, and the sulfur and ash content of the coal.
- 3. Throughput and emission records for boilers FB1, FB2, and FB3:
 - a. The calendar year annual throughput of wood fuel and distillate fuel oil in the Erie City boiler FB1, for calculating calendar year emissions and fees.
 - b. The annual throughput of wood fuel and coal for the large Union Iron Works boiler FB2, calculated as the sum of each consecutive twelve (12) month period.
 - c. The calendar year annual throughput of distillate fuel oil in the small Hurst oil boiler FB3, for calculating calendar year emissions and fees.
 - d. (1) The annual emissions of Particulate Matter, PM-10, SO₂, and NOx in tons from the large Union Iron Works boiler FB2, calculated as the sum of each consecutive twelve (12) month period, and (2) the calendar year annual emissions from the Erie City Boiler FB1 and the small Hurst oil boiler FB3 for calculating calendar year emissions and fees. The emission factors, control efficiencies, and emission calculation equations used in these emission calculations shall be identified and readily available.

(9 VAC 5-80-110, 9 VAC 5-80-110 E, F, K, 9 VAC 5-40-50)

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, 9 VAC 5-40-50)

D. **Testing -** Fuel Boilers (EU-FB)

1. Stack testing the large wood fuel/coal Union Iron Works boiler FB2 for particulate emissions: Once per permit term performance tests (stack tests) shall be conducted for particulate emissions from the large wood fuel/coal Union Iron Works boiler FB2 (110 million Btu/hr input capacity boiler), to determine compliance with the particulate emission limits in this permit (a) when burning wood fuel and (b) when burning coal. This testing shall be performed within three (3) years after the beginning of each 5 year term of this permit. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-40-30. The details of the tests are to be arranged with the Director, West Central Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the West Central Regional Office within 45 days after test completion and shall conform to the DEQ test report format.

At the option of the permittee, this stack test may be delayed, even indefinitely, with notification to DEQ and adequate recordkeeping, until the combined wood fuel plus coal throughput in Btus for this boiler exceeds 50% of its annual capacity factor, calculated monthly as the sum of each consecutive twelve (12) month period (boiler FB2 optional stack testing trigger = 50% x 110 million Btu/hr capacity x 8760 hrs/yr = 481,800 million Btu/yr fuel throughput). The delayed test shall be performed no later than 180 days after exceeding the 50% annual throughput amount.

2. If testing is conducted in addition to the testing and monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

	Subject to DEQ approval at the time of the test (except
Pollutant	Method 9).
	(40 CFR Part 60, Appendix A)
PM/PM-10	Method subject to DEQ approval at the time of testing
Sulfur Dioxide	AP-42 emission factors and fuel analysis,
Sulful Dioxide	or EPA Method 6, or DEQ approved method
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

E. Reporting - Fuel Boilers (EU-FB)

Also see reporting under the General Conditions below.

IV. - 1. Process Equipment Requirements - Wood Working Systems (EU-WDS).

This equipment group includes all wood working processes and equipment, including wood working equipment, hogging, material transfers, storage, and air handling systems. All wood dust emission sources are controlled by either baghouse filters (fabric filters exhausting to atmosphere), or closed loop cyclones without emissions. There are 25 main baghouses/air handling systems, including three (3) added since 1972 and which have NSR permit requirements. There is no applicable NSPS for this process. The wood furniture plant MACT does not apply to the wood working materials and processes that are currently used at this plant. The following NSR permits (by date) apply to portions of the wood working equipment group:

9-21-93 (BF1-3 [at one time named No. 6 production line]), 1-14-00 (BF5-2), 6-8-01 (BF5-3 [at one time named BF7-2]).

Limitations - Wood working systems (EU-WDS)

- 1. All wood dust emission sources and wood dust air handling systems shall be controlled by baghouses (fabric filters), closed loop cyclones, or DEQ approved equivalent. These include wood working equipment, hogging, material transfers and storage bins, and wood dust air handling systems. The fabric filters shall be provided with adequate access for inspection and maintained by the permittee such that they are in proper working order. (9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 9 VAC 5-50-260, 9 VAC 5-170-160, 9-21-93 NSR permit conditions 3 & 4, 1-14-00 NSR permit conditions 3 & 4, 6-8-01 NSR permit conditions 3 & 4)
- The BF1-3 wood working air handling system shall not operate more than 4800 hours per year, calculated as the sum of each consecutive twelve (12) month period.
 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 9 VAC 5-170-160, 9-21-93 NSR permit condition 7)
- 3. The BF5-2 and BF5-3 wood working air handling systems each shall not operate more than 5400 hours per year, calculated as the sum of each consecutive twelve (12) month period. (9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 9 VAC 5-170-160, 1-14-00 NSR permit condition 6, 6-8-01 NSR permit condition 6)
- 4. Particulate emissions from each wood working air handling system baghouse for this equipment group, except BF1-3, BF5-2 and BF5-3, shall not exceed 0.05 grains per standard cubic foot of exhaust gas.

 (9 VAC 5-80-110, 9 VAC 5-40-2270)

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5. Emissions from the operation of wood working air handling system BF1-3 shall not exceed the limits specified below:

Particulate matter 0.01 grain/dscf 4.63 lbs/hr 11.1 tons/yr PM-10 0.01 grain/dscf 4.63 lbs/hr 11.1 tons/yr

The annual amount shall be calculated as the sum of each consecutive twelve (12) month period.

(9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 9 VAC 5-50-10 D, 9 VAC 5-50-260, 9 VAC 5-40-2270, 9-21-93 NSR permit condition 8)

6. Emissions from the operation of wood working air handling system BF5-2 shall not exceed the limits specified below:

Particulate matter 0.01 grain/dscf 14.6 tons/yr PM-10 0.01 grain/dscf 14.6 tons/yr

The annual amount shall be calculated as the sum of each consecutive twelve (12) month period

- (9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 9 VAC 5-50-10 D, 9 VAC 5-50-260, 9 VAC 5-40-2270, 1-14-00 NSR permit condition 7)
- 7. Emissions from the operation of wood working air handling system BF5-3 shall not exceed the limits specified below:

Particulate matter 0.01 grain/dscf 14.0 tons/yr PM-10 0.01 grain/dscf 14.0 tons/yr

The annual amount shall be calculated as the sum of each consecutive twelve (12) month period

- (9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 9 VAC 5-50-10 D, 9 VAC 5-50-260, 9 VAC 5-40-2270, 6-8-01 NSR permit condition 7)
- 8. Visible emissions from each of the BF1-3, BF5-2, and BF5-3 wood working air handling systems/ baghouses shall not exceed five (5) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.

Visible emissions from each of the wood working air handling systems/ baghouses other than BF1-3, BF5-2, and BF5-3 shall not exceed 20 percent opacity except during one sixminute period in any one hour in which visible emissions shall not exceed 30 percent opacity.

(9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 9 VAC 5-50-260, 9 VAC 5-50-80, 9 VAC 5-40-80, 9-21-93 NSR permit condition 9, 1-14-00 NSR permit condition 8, 6-8-01 NSR permit condition 8)

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9. Visible fugitive emissions resulting from the collection, transfer or handling of wood fuel related to the BF1-3, BF5-2, and BF5-3 wood working air handling systems/ baghouses shall not exceed 10 percent opacity as determined by 40 CFR 60, Appendix A, Method 9 (EPA Method 9).

Visible fugitive emissions resulting from the collection, transfer or handling of wood fuel related to wood working air handling systems/ baghouses other than BF1-3, BF5-2, and BF5-3 shall not exceed 20 percent opacity as determined by 40 CFR 60, Appendix A, Method 9 (EPA Method 9).

(9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 9 VAC 5-50-260, 9 VAC 5-50-80, 9 VAC 5-40-80, 9-21-93 NSR permit condition 10, 1-14-00 NSR permit condition 9, 6-8-01 NSR permit condition 9)

Monitoring/Operation & Maintenance/Recordkeeping - Wood working systems (EU-WDS)
Also see the Recordkeeping and Reporting sections for this Emissions Unit group and under the Facility Wide and General Conditions Sections below.
(9 VAC 5-80-110)

- 1. Pressure Drop Monitoring Each fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The pressure drop shall be recorded weekly. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. (9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 9-21-93 NSR permit condition 3, 1-14-00 NSR permit condition 5, 6-8-01 NSR permit condition 5)
- 2. <u>Visible Emissions Monitoring</u> At least once per week an observation for the presence of visible emissions from each wood working equipment/wood working air handling system fabric filter (EU-WDS) shall be made. If visible emissions are observed, the permittee shall:
 - a. take timely corrective action such that the fabric filter resumes operation with no visible emissions, or,
 - b. perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the fabric filter does not exceed the applicable five (5) or 20 percent opacity limitation in this section. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed the applicable five (5) or 20 percent opacity limitation, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the fabric filter resumes operation with

visible emissions of the applicable five (5) or 20 percent opacity limitation or less.

The permittee shall maintain a fabric filter observation log to demonstrate compliance. The log shall identify the emissions point and include the date and time of the observations, whether or not there were visible emissions, any VEE recordings, and any necessary corrective action.

(9 VAC 5-80-110E)

- 3. Operation and Maintenance Procedures The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to wood working air pollution control equipment and process equipment which affect such
 - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

emissions:

- b. Develop an inspection schedule, monthly at a minimum, to insure the operational integrity of the fabric filters and maintain records of inspection results.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.
- e. Maintain an inventory of spare parts that are needed to maintain the fabric filters in proper working order to minimize emissions.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9 VAC 5-80-110, 9 VAC 5-80-110 F & K, 9 VAC 5-40-20 E, 9 VAC 5-50-20 E)

Additional Recordkeeping - Wood working systems (EU-WDS)

Also see Facility Wide Conditions and Recordkeeping under the General Conditions below.

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, West Central Regional Office. These records shall include, but are not limited to:

- 1. The calendar year annual throughput of wood, for calculating calendar year emissions and fees.
- 2. The annual hours of operation of baghouses BF1-3, BF5-2, and BF5-3, calculated as the sum of each consecutive twelve (12) month period.
- 3. Records as required by the monitoring conditions for this emissions group (including control device inspections and corrective actions, pressure drop across fabric filters, and visible emissions observations).

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 9 VAC 5-40-50, 9 VAC 5-50-50, 9-21-93 NSR permit condition 12, 1-14-00 NSR permit condition 10, 6-8-01 NSR permit condition 10, 5-19-99 NSR permit amended 7-29-02 condition 16)

Testing - Wood working systems (EU-WDS)

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method - Subject to DEQ approval at the time of the test (except Method 9). (40 CFR Part 60, Appendix A)
PM/PM-10	Method subject to DEQ approval at the time of testing.
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

Reporting - Wood working systems (EU-WDS)

Also see Reporting under the General Conditions below.

IV. -2. Process Equipment Requirements - Finishing (EU-F).

This group EU-F includes <u>all finishing for the facility</u>, both (F1) all unpermitted existing finishing, and (F2) all Plant 2 finishing constructed under the Plant 2 PSD NSR permit issued 5-19-99 and amended/reissued 7-29-02.

The wood furniture manufacturing MACT applies as an existing MACT JJ source (40 CFR 63 Subpart JJ) to both F1 (non-Plant 2) and F2 (Plant 2). The plant's primary method for meeting the MACT is to use MACT compliant coatings, although finishing can fall back on monthly averaging, or any other option as allowed under the MACT requirements. No NSPS applies to wood furniture finishing. A 5-19-99 PSD NSR permit amended/reissued 7-29-02 applies to the Plant 2 finish room, F2. No NSR permit is applicable to finishing in other parts of the facility.

F1 consists of all finishing operations other than F2 (Plant 2) finishing operations. F1 includes 38 finishing spray booths and related facilities, including various ovens and 6 washoff tanks. F2 (Plant 2) finishing operations consists of 11 finishing spray booths and related facilities in Plant 2 finishing, including a community oven.

Limitations - Finishing (EU-F)

Particulate emissions from each finishing spray booth, refr. EU-F, when its spraying
equipment is operating, shall be controlled by dry filters or water curtain spray booths or
equivalent at a minimum. The overspray particulate controls shall be provided with
adequate access for inspection and maintained by the permittee such that they are in proper
working order.

(9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 9 VAC 5-50-20, 9 VAC 5-50-260, 5-19-99 NSR permit amended 7-29-02 condition 3, 9 VAC 5-40-20, 9 VAC 5-170-160)

- 2. Fugitive emission controls: Volatile organic compounds (VOCs) shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.

 (9 VAC 5-80-110, 9 VAC 5-40-20 F, 9 VAC 5-50-20 F)
- 3. Volatile Organic Compound emissions from the Plant 2 finishing line (F2) spray booths shall be minimized by proper spraying technique, the use of HVLP and/or air assisted airless spray equipment, and by complying with the Work Practice Standards of 40 CFR 63, Subpart JJ.

(9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-50-1100, 9 VAC 5-50-260, 5-19-99 NSR permit amended 7-29-02 condition 5)

4. The throughput of VOC in finishing and related materials in Plant 2 finishing (F2) shall not exceed 350.0 tons per year, calculated as the sum of each consecutive twelve (12) month period.

(9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 9 VAC 5-80-1700, 9 VAC 5-170-160, 9 VAC 5-50-20, 5-19-99 NSR permit amended 7-29-02 condition 6)

- 5. The throughput of gross board feet of lumber used in manufacturing furniture for the Plant 2 finishing line (F2) shall not exceed 3.1 million board feet per year, calculated as the sum of each consecutive twelve (12) month period.
 (9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 5-19-99 NSR permit amended 7-29-02 condition 7)
- 6. Particulate emissions from the operation of the Plant 2 finishing line (F2) shall not exceed 5.0 tons per year, calculated as the sum of each consecutive twelve (12) month period. (9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1700, 9 VAC 5-80-1700, 9 VAC 5-50-260, 5-19-99 NSR permit amended 7-29-02 condition 8)
- 7. Visible emissions from each Plant 2 (F2) finishing spray booth shall not exceed five (5) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.

Visible emissions from each finishing spray booth, except Plant 2 (F2) finishing spray booths, shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.

- (9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 9 VAC 5-50-260, 9 VAC 5-50-80, 5-19-99 NSR permit amended 7-29-02 condition 13, 9 VAC 5-40-80)
- 8. All finishing, including Plant 2 finishing (F2), shall be operated in compliance with 40 CFR 63 Subpart JJ (wood furniture manufacturing MACT) as an existing affected source. (9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 9 VAC 5-50-260, 9 VAC 5-60-90, 5-19-99 NSR permit amended 7-29-02 condition 14)

Monitoring/Operation & Maintenance/Recordkeeping - Finishing (EU-F)

Also see Facility Wide Conditions and Recordkeeping under the General Conditions below.

1. <u>Visible Emissions:</u> - At least once per week an observation for the presence of visible emissions from the finishing spray booth stacks (ES-F) shall be made. If any visible emissions are observed, the permittee shall:

- a. take timely corrective action such that the spray booth resumes operation with no visible emissions, or,
- b. perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the spray booth stack does not exceed the applicable five (5) or 20 percent opacity limitation in this section. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed the applicable five (5) or 20 percent opacity limitation in this section, the VEE shall be conducted for a total of 60 minutes. If compliance is not demonstrated by this VEE, timely corrective action shall be taken such that the spray booth resumes operation with visible emissions of the applicable five (5) or 20 percent opacity or less.

The permittee shall maintain a finishing observation log to demonstrate compliance. The log shall identify the emissions point and include the date and time of the observations, whether or not there were visible emissions, any VEE recordings, and any necessary corrective action.

(9 VAC 5-80-110, 9 VAC 5-80-110 E, F, K, 9 VAC 5-40-20 E, 9 VAC 5-50-20 E)

- 2. Operation and Maintenance Procedures The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to finishing air pollution control equipment and process equipment which affect such emissions:
 - Develop a maintenance schedule and maintain records of all scheduled and nonscheduled maintenance.
 - b. Develop an inspection schedule, monthly at a minimum, to insure the operational integrity of the overspray collectors and maintain records of inspection results.
 - c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.
 - e. Maintain an inventory of spare parts that are needed to maintain the finishing overspray collectors in proper working order to minimize emissions.

Records of maintenance, inspections and training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9 VAC 5-80-110, 9 VAC 5-80-110 F & K, 9 VAC 5-40-20 E, 9 VAC 5-50-20 E, 9 VAC 5-80-10, 9 VAC 5-80-1100, 5-19-99 NSR permit amended 7-29-02 conditions 21 and 22)

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- 3. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, West Central Regional Office. These records shall include, but are not limited to:
 - a. *Plant 2 throughput and emissions*: Monthly and annual material balance including the throughput and emissions of VOC and particulates associated with Plant 2 finishing (F2). Plant 2 annual throughput and emissions shall be calculated as the sum of each consecutive twelve (12) month period. Plant 2 throughput shall be calculated as the summation of finishes applied to each case. Plant 2 particulate emissions from furniture finishing shall be calculated using 50% transfer efficiency and 90% control efficiency. (Except for VOCs removed from the facility as waste or liquids, all the VOC throughput evaporates to atmosphere.)
 - b. *Plant 2 lumber throughput*: Monthly and annual material balance including the throughput of gross board feet of lumber used in manufacturing associated with Plant 2 finishing (F2). The annual quantities shall be calculated as the sum of each consecutive twelve (12) month period. The gross board feet of lumber used shall be calculated as the summation of net board feet used for each manufactured case, divided by the percent yield on an annualized basis.
 - c. *Plant 2 operating hours:* Daily record of the number of hours of operation of Plant 2 finishing (F2) spray booths. Annual quantities shall be calculated as the sum of each consecutive twelve (12) month period.
 - d. *Plant 2 other*: A certified annual report which provides the purchase price variance, as a percentage, comparing actual to costed prices for finishes applied at the Stanleytown facility.
 - e. *Combined plant throughput*: The combined plant calendar year annual throughput of finish and related materials, in tons of VOC, tons of solids, and either tons or gallons of finish and related materials, for calculating calendar year emissions and fees.
 - f. *Combined plant emissions*: The combined plant calendar year annual VOC and particulate emissions in tons from finishing and related operations, for calculating calendar year emissions and fees. The emission factors and emission calculation equations used in these emission calculations shall be identified and readily available. (Except for VOCs removed from the facility as waste or liquids, all the VOC throughput evaporates to atmosphere.)
 - g. *MACT JJ monthly averaging option*: Monthly finishing throughput for the combined plant for finish and related materials, in tons of VOC and tons of solids, for each month that the monthly averaging option (instead of the compliant coating option) is used to comply with 40 CFR 63 Subpart JJ (MACT JJ). [Note that 40 CFR 63 Subpart JJ requires considerable additional recordkeeping for each month that the monthly averaging option is used.]

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h. Records as required by the rest of this Monitoring and Recordkeeping section.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, 9 VAC 5-80-10, 9 VAC 5-80-1100, 9 VAC 5-80-1700, 9 VAC 5-40-50, 9 VAC 5-50-50, 5-19-99 NSR permit amended 7-29-02 condition 16)

Additional Recordkeeping - Finishing (EU-F)

Also see Facility Wide Conditions (including MACT record keeping), and Recordkeeping under the General Conditions below.

Testing - Finishing (EU-F)

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Т	Test Method - Subject to DEQ approval at the time of the test (except
Pollutalit		Method 9). (40 CFR Part 60, Appendix A)
MOC	4	0 CFR 63 Subpart JJ Wood Furniture MACT Certified Product Data
VOC	Shee	ets, or 40 CFR 60 Appendix A method 24, or DEQ approved equivalent.
Visible Emission		EPA Method 9

(9 VAC 5-80-110)

Reporting - Finishing (EU-F)

Also see Facility Wide Conditions and Reporting under the General Conditions below, and the MACT requirements.

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IV. -3. Process Equipment Requirements - Contact Adhesive Process - Refr. Con-Adh.

The plant has a small contact adhesive operation which includes one (1) contact adhesive spray booth. The wood furniture MACT, 40 CFR 63 Subpart JJ, applies to contact adhesives. The plant uses MACT compliant contact adhesives. No NSPS currently applies to this process. No NSR permit applies to this process.

Limitations - Contact Adhesive Process (Con-Adh)

- 1. The contact adhesive process shall be operated in compliance with the requirements of 40 CFR 63 Subpart JJ (wood furniture manufacturing MACT) as an existing affected source. (9 VAC 5-80-110, 9 VAC 5-60-100)
- 2. Particulate emissions from each contact adhesive spray booth, refr. Con-Adh, when its spraying equipment is operating, shall be controlled by water wash spray booths, spray booth dry filters, or equivalent at a minimum. The overspray particulate controls shall be provided with adequate access for inspection and maintained by the permittee such that they are in proper working order when the spraying equipment is operating. (9 VAC 5-80-110, 9 VAC 5-170-160)
- Visible emissions from each contact adhesive spray booth stack shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.
 (9 VAC 5-80-110, 9 VAC 5-40-80, 9 VAC 5-50-80, 9 VAC 5-170-160)

Monitoring/Operation & Maintenance/Recordkeeping - Contact Adhesive Process (Con-Adh)

Also see Facility Wide Conditions and Recordkeeping under the General Conditions below.

- 1. <u>Visible Emissions:</u> At least once per week an observation for the presence of visible emissions from each contact adhesive spray booth stack shall be made. If any visible emissions are observed, the permittee shall:
 - a. take timely corrective action such that the contact adhesive spray booth resumes operation with no visible emissions, or,
 - b. perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the contact adhesive spray booth exhaust to atmosphere does not exceed 20 percent opacity. The VEE shall be conducted for a minimum of six (6) minutes. If any of the observations exceed 20 percent, the VEE shall be conducted for a total of 60 minutes. If compliance is not

demonstrated by this VEE, timely corrective action shall be taken such that the contact adhesive spray booth resumes operation with visible emissions of 20 percent or less.

The permittee shall maintain a contact adhesive observation log to demonstrate compliance. The log shall identify the emissions point and include the date and time of the observations, whether or not there were visible emissions, any VEE recordings, and any necessary corrective action. (9 VAC 5-80-110E)(9 VAC 5-80-110E)

- 2. <u>Operation and Maintenance Procedures</u> The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions from any contact adhesive spray booth, with respect to this equipment which affects such emissions:
 - a. Have available written operating procedures for the equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
 - b. Train operators in the proper operation of the equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of training shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request. (9 VAC 5-80-110, 9 VAC 5-80-110 F & K, 9 VAC 5-40-20 E)

- 3. <u>The permittee shall maintain records</u> of all emission data and operating parameters necessary for this process to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, West Central Regional Office. These records shall include, but are not limited to:
 - a. *Throughput*: The calendar year annual throughput of contact adhesive and related materials, in tons of VOC for the VOC content that evaporates, tons of solids, and either tons or gallons of contact adhesive and related material, for calculating calendar year emissions and fees. [Note that 40 CFR 63 Subpart JJ may require additional recordkeeping.]
 - b. *VOC Emissions*: The calendar year annual VOC emissions in tons from contact adhesive and related materials, for calculating calendar year emissions and fees. The emission factors and emission calculation equations used in these emission calculations shall be identified and readily available. (Except for VOCs removed from the facility as waste or liquids, all the evaporable VOC throughput evaporates to atmosphere.)

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c. Records as required by the rest of this Monitoring and Recordkeeping section.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, 9 VAC 5-40-50)

Additional Recordkeeping - Contact Adhesive Process (Con-Adh)

Also see Facility Wide Conditions (including MACT record keeping) and Recordkeeping under the General Conditions below.

Testing - Contact Adhesive Process (Con-Adh)

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method - Subject to DEQ approval at the time of the test (except Method 9). (40 CFR Part 60, Appendix A)		
Volatile Organic Compounds	40 CFR 63 Subpart JJ Wood Furniture MACT Certified Product Data Sheets, or 40 CFR 60 Appendix A method 24, or DEQ approved equivalent.		
Visible Emission	EPA Method 9		

(9 VAC 5-80-110)

Reporting - Contact Adhesive Process (Con-Adh)

Also see Facility Wide Conditions and Reporting under the General Conditions below, and the MACT requirements.

IV. -4. Process Equipment Requirements - Drying Kilns (Lumber) - Refr. EU-DK

The plant has 13 lumber drying kilns that can hold a combined total of 1,905,000 BRD FT of lumber. Annual throughput capacity is approximately 35,000,000 BRD FT. Each kiln is a small stationary building that slowly dries stationary stacks of lumber by heating for days with steam heated pipes in the building. The only emissions are a small amount of VOC without visible emissions (often less than 5 tons/yr) and moisture evaporated from stacks of warm lumber in the buildings. No MACT, NSPS, or NSR permit limit is applicable at this time.

Limitations - Drying Kilns (EU-DK); Not Applicable - No limitations.

Monitoring/Operation & Maintenance/Recordkeeping - Drying Kilns (EU-DK)

Also see Facility Wide Conditions and Recordkeeping under the General Conditions below.

- 1. Visible Emissions: Not Applicable (inherently no visible emissions).
- 2. Operation and Maintenance Procedures Not Applicable.
- 3. The permittee shall maintain records of all emission data and operating parameters necessary for this process to quantify calendar year annual VOC emissions. The content of and format of such records shall be arranged with the Director, West Central Regional Office. These records shall include, but are not limited to:
 - a. *Throughput*: The calendar year annual throughput of lumber in board feet and type of lumber sufficient for calculating calendar year emissions and fees for all lumber drying kilns combined.
 - b. *VOC Emissions*: The calendar year annual VOC emissions in tons from all lumber drying kilns combined, for calculating calendar year emissions and fees. The emission factors and emission calculation equations used in these emission calculations shall be identified and readily available.
 - c. Records as required by the rest of this Monitoring and Recordkeeping section.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, 9 VAC 5-40-50)

Additional Recordkeeping - Drying Kilns (EU-DK)

Also see Facility Wide Conditions and Recordkeeping under the General Conditions below.

Testing - Drying Kilns (EU-DK)

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method - Subject to DEQ approval at the time of the test (except Method 9). (40 CFR Part 60, Appendix A)
Volatile Organic Compounds	DEQ approved method at the time of the test.

(9 VAC 5-80-110)

Reporting - Drying Kilns (EU-DK)

Also see Reporting under the General Conditions below.

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V. Facility Wide Conditions - Wood Furniture MACT JJ - (40 CFR 63 Subpart JJ)

The facility is to be operated in compliance with Federal requirements under 40 CFR Part 63 Subpart JJ, including applicable future revisions (a copy is attached). This includes the applicable General Provisions, Subpart A of 40 CFR 63, as identified in Table 1 in 40 CFR 63 Subpart JJ. All terms used regarding 40 CFR 63 Subpart JJ shall have the meanings as defined in 40 CFR 63.801 and 40 CFR 63.2. The terms and conditions below are from 40 CFR 63 Subpart JJ. (9 VAC 5-60-100, 40 CFR 63.800 et seq. (Subpart JJ), 40 CFR 63 Subpart A)

A. Limitations

- 1. Volatile Hazardous Air Pollutant (VHAP) emissions from the facility shall not exceed the following limits:
 - a. For finishing operations use any of the following methods:
 - Achieve a weighted average VHAP content across all coatings of 1.0 lb VHAP/lb solids, as applied;
 - (2) Use compliant finishing materials that meet the following specifications:
 - (a) Each sealer and topcoat has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
 - (b) Each stain has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
 - (c) Each thinner contains no more than 10.0 percent VHAP by weight except where excluded by (e) of this sub-section. For purposes of calculating thinner content of this section, VHAP equals HAP;
 - (d) Each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 lb VHAP/lb solids, as applied;
 - (e) Each washcoat, basecoat, and enamel that is formulated onsite is formulated using a finishing material containing no more than 1.0 lb VHAP/lb solids and a thinner containing no more than 3.0 percent VHAP by weight;
 - (3) Use any combination of averaging and compliant coatings such that no greater than 1.0 lb of VHAP being emitted per lb of solids used;
 - For cleaning operations strippable spray booth coatings shall be used that contain no more than 0.8 lb VOC/lb solids, as applied;
 - c. Compliant contact adhesives shall be used based on the following criteria:
 - (1) For aerosol adhesives, as well as hot melt, PVA, and urea-formaldehyde

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adhesives, and for contact adhesives applied to nonporous substrates there is no limit on the VHAP content of these adhesives;

- (2) For foam adhesives used in products that meet flammability requirements the VHAP content can be no more than 1.8 lb VHAP/lb solids, as applied;
- (3) For all other contact adhesives the VHAP content can be no more than 1.0 lb VHAP/lb solids, as applied;

(9 VAC 5-170-160, 9 VAC 5-80-110, and 40 CFR 63.802)

- 2. The permittee shall develop and implement the following work practice standards:
 - a. Work practice implementation plan The permittee shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for the finishing and gluing operations and addresses each of the work practice standards presented in Conditions b. through I. that follow. The plan shall be developed no more than 60 days after the compliance date. The written work practice implementation plan shall be available for inspection by the Administrator upon request. If the Administrator determines that the work practice implementation plan does not adequately address each of the topics specified in 40 CFR 63.803 or that the plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator may require the permittee to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.
 - b. Operator training course The permittee shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, in the use of manufacturing equipment in these operations, or implementation of the requirements of 40 CFR Part 63 Subpart JJ. All new personnel shall be trained upon hiring. All existing personnel shall be trained within six months of the compliance date. All personnel shall be given refresher training annually. The permittee shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:
 - (1) A list of all current personnel by name and job description that are required to be trained;
 - (2) An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
 - (3) Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and
 - (4) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.

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- c. <u>Inspection and maintenance plan</u> The permittee shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:
 - (1) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents;
 - (2) An inspection schedule;
 - (3) Methods for documenting the date and results of each inspection and any repairs that were made;
 - (4) The time frame between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
 - (a) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and
 - (b) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.
- d. <u>Cleaning and washoff solvent accounting system</u> The permittee shall develop an organic HAP solvent accounting form to record:
 - (1) The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in 40 CFR 63.801;
 - (2) The number of pieces washed off, and the reason for the washoff; and
 - (3) The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.
- e. Chemical composition of cleaning and washoff solvents The permittee shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 of 40 CFR Part 63 Subpart JJ, in concentrations subject to MODS reporting as required by OSHA.
- f. Spray booth cleaning The permittee shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the permittee shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.
- g. Storage requirements The permittee shall use normally closed containers for storing

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finishing, gluing, cleaning, and washoff materials.

- h. <u>Application equipment requirements</u> The permittee shall use conventional air spray guns to apply finishing materials only under any of the following circumstances:
 - (1) To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied;
 - (2) For touchup and repair under the following conditions:
 - (a) The touchup and repair occurs after completion of the finishing operation; or
 - (b) The touchup and repair occurs after the application of stain and before the application of any other type of finishing material, and the materials used for touchup and repair are applied from a container that has a volume of no more than 2.0 gallons.
 - (3) When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually;
 - (4) When emissions from the finishing application station are directed to a control device:
 - (5) The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more than 5.0 percent of the total gallons of finishing material used during that semiannual period; or
 - (6) The conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology. The permittee shall demonstrate technical or economic infeasibility by submitting to the Administrator a videotape, a technical report, or other documentation that supports the permittee's claim of technical or economic infeasibility. The following criteria shall be used, either independently or in combination, to support the permittee's claim of technical or economic infeasibility:
 - (a) The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator; or
 - (b) The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain.
- i. <u>Line cleaning</u> The permittee shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.
- j. <u>Gun cleaning</u> The permittee shall collect all organic HAP solvent used to clean spray guns into a normally closed container.
- k. <u>Washoff operations</u> The permittee shall control emissions from washoff operations by:

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- (1) Using normally closed tanks for washoff; and
- (2) Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.
- I. <u>Formulation assessment plan for finishing operations</u> The permittee shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:
 - (1) Identifies VHAP from the list presented in Table 5 of 40 CFR Part 63 Subpart JJ that are being used in finishing operations;
 - (2) Establishes a baseline level of usage for each VHAP identified. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified, except for formaldehyde and styrene which shall be determined as specified by 40 CFR 63.803 (I)(2). For VHAPs that do not have a baseline, one will be established according to Condition (6) below.
 - (3) Tracks the annual usage of each VHAP identified in (I)(1), above, that is present in amounts subject to MODS reporting as required by OSHA.
 - (4) If the annual usage of the VHAP identified exceeds its baseline level, then the permittee shall provide a written notification to the Director, West Central Regional Office, that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:
 - (a) The exceedance is no more than 15.0 percent above the baseline level;
 - (b) Usage of the VHAP is below the de minimis level presented in Table 5 of 40 CFR Part 63 Subpart JJ for that VHAP;
 - (c) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
 - (d) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 lb VOC/lb solids, as applied.
 - (5) If none of the explanations listed in (4) above are the reason for the increase, the permittee shall confer with the Director, West Central Regional Office, to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the Director, West Central Regional Office, and the owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or

operator shall develop a plan to reduce the usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.

(6) If the permittee uses a VHAP of potential concern listed in Table 6 of 40 CFR Part 63 Subpart JJ for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level provided in that same table for that chemical. The permittee shall track the annual usage of each VHAP of potential concern identified that is present in amounts subject to MODS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the de minimis level listed in Table 6 of 40 CFR Part 63 Subpart JJ for that chemical, then the permittee shall provide an explanation to the Director, West Central Regional Office, that documents the reason for the exceedance of the de minimis level. If the explanation is not one of those listed in (4) above, the affected source shall follow the procedures established in (5) above.

(9 VAC 5-170-160, 9 VAC 5-80-110, and 40 CFR 63.803(a)-(I))

- 3. The permittee shall meet the following operation and maintenance requirements:
 - a. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain the facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.
 - b. Malfunctions shall be corrected as soon as practicable after their occurrence.
 - c. Operation and maintenance requirements established pursuant to section 112 of the Clean Air Act are enforceable independent of emissions limitations or other requirements in relevant standards.
 - d. Determination of whether operation and maintenance procedures are being used will be based on information available to the DEQ which may include, but is not limited to, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(9 VAC 5-170-160, 9 VAC 5-80-110, and 40 CFR 63.6(e))

B. Monitoring

Continuous compliance with the VHAP emissions limits shall be determined as follows:

1. For finishing operations when averaging is being used to show continuous compliance, the permittee shall submit the results of the averaging calculation (Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report. The compliance certification shall state that the value of (E), as calculated by Equation 1, is no greater than 1.0. The facility is in violation of the standard if E is greater than 1.0 for any month. A violation

of the monthly average is a separate violation of the standard for each day of operation during the month, unless the affected source can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period.

$$E = (M_{c1}C_{c1} + M_{c2}C_{c2} + ... + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + ... S_nW_n)/(M_{c1} + M_{c2} + ... + M_{cn})$$
...... Equation 1

E = the emission limit achieved by an emission point or a set of emission points, in lb VHAP/lb solids.

M_c = the mass of solids in a finishing material or coating 8 used monthly, including exempt finishing materials and coatings, lb solids/month.

C_c = the VHAP content of a finishing material or coating (c), in pounds of VHAP per pound of coating solids.

S = the VHAP content of a solvent, expressed as a weight fraction, added to finishing materials or coatings.

W = the amount of solvent in pounds, added to finishing materials and coatings during the monthly as

the amount of solvent, in pounds, added to finishing materials and coatings during the monthly averaging period.

The Emission Limit (E in lb VHAP / lb solids) equals the sum, for all finishing materials and coatings, of the mass of solids in each material used within that month (M_c in lb solids / month) multiplied by the VHAP content in each material (C_c in lb VHAP / lb solids) plus the sum, for all solvents, of the mass of solvent used monthly (W in lb solvent / month) multiplied by the weight fraction of VHAP in the solvent (S in lb VHAP / lb solvent), with this total being divided by the sum, for all finishing materials and coatings, of the mass of solids in each finishing material and coating used within that month (M_c in lb solids / month).

- 2. For finishing operations when compliant coatings are being used to show continuous compliance, the permittee shall use compliant coatings and thinners, maintain records that demonstrate the finishing materials and thinners are compliant, and submit a compliance certification with the semiannual report which states that compliant stains, washcoats, sealers, topcoats, basecoats, enamels, and thinners, as stated in Condition V.A.1, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. The facility is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used.
- 3. For contact adhesive operations when compliant adhesives are being used to show compliance, the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant contact and/or foam adhesives have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant contact and/or foam adhesives were used. Each day a noncompliant contact or foam adhesive is used is a single violation of the standard.
- 4. For strippable spray booth coatings the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used is a single violation of the standard.
- 5. For work practice standards the permittee shall submit a compliance certification with the semiannual report. The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that the permittee is required to implement

the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation and the Administrator may require the permittee to modify the plan (see Condition V.A.2.a).

(9 VAC 5-170-160, 9 VAC 5-80-110, and 40 CFR 63.804(g) & 40 CFR 63.8)

C. Recordkeeping

The permittee shall maintain records of the following:

- 1. For emission limit purposes, the permittee shall maintain the following:
 - a. A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to the emission limits in Condition V.A.1,
 - b. The VHAP content, in lb VHAP/lb solids, as applied, of each finishing material and contact adhesive subject to the emission limits in Conditions V.A.1.a and V.A.1.c; and
 - c. The VOC content, in lb VOC/lb solids, as applied, of each strippable booth coating subject to the emission limits in Condition V.A.1.b.
- 2. Following the averaging method the permittee shall maintain copies of the averaging calculation for each month following the compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E in Equation 1 (as defined in Condition V.B.1).
- 3. The permittee shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:
 - a. Records demonstrating that the operator training program required by Condition V.A.2.b is in place;
 - b. Records collected in accordance with the inspection and maintenance plan required by Condition V.A.2.c;
 - c. Records associated with the cleaning solvent accounting system required by Condition V.A.2.d;
 - d. Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period required by Condition V.A.2.h;
 - e. Records associated with the formulation assessment plan required by Condition V.A.2.I; and
 - f. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed.
- 4. The permittee shall maintain records of the compliance certifications submitted for

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each semiannual period following the compliance date.

- 5. The permittee shall maintain records of all other information submitted with the compliance status report and the semiannual reports.
- 6. The permittee shall maintain files of all information (including all reports and notifications) required, recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be retained on site. The remaining three (3) years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(9 VAC 5-170-160, 9 VAC 5-80-110, and 40 CFR 63.806 & 63.10(b)(1))

D. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method
Hazardous Air Pollutants (HAPs)	40 CFR Part 63, Appendix A, EPA Method 311
Solids Content & Density of Coatings	40 CFR Part 60, Appendix A, EPA Method 24

(9 VAC 5-80-110)

E. Reporting

- Each time a notification of compliance status is required (see Condition IX.C), the
 permittee shall submit to the Director, West Central Regional Office, a notification of
 compliance status, signed by a responsible official of the company that owns or operates
 the facility who shall certify its accuracy, attesting to whether the source has complied
 with 40 CFR Part 63 Subpart JJ. The notification shall list:
 - a. The methods that were used to determine compliance;
 - b. The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted:
 - c. The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
 - d. The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified;
 - e. An analysis demonstrating whether the facility is a major source or an area source

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(using the emissions generated for this notification);

f. A statement by the permittee as to whether the facility has complied with 40 CFR 63 Subpart JJ as expressed in this permit.

Copies of each 40 CFR 63 Subpart JJ (MACT JJ) notification shall be sent to:

U. S. EPA Region III Air Protection Division (3AP00) ATTN: Wood Furniture NESHAP (40 CFR 63 Subpart JJ) Coordinator 1650 Arch Street Philadelphia, PA 19103 - 2029.

Va. DEQ Director, West Central Regional Office Attn: Air Compliance Manager 3019 Peters Creek Road Roanoke, VA 24019

(9 VAC 5-170-160, 9 VAC 5-80-110, and 40 CFR 63.9(h))

- 2. Reporting not otherwise required by this permit shall consist of the following:
 - a. The permittee when demonstrating continuous compliance shall submit a report covering the previous six (6) months of wood furniture manufacturing operations (see Condition IX.C.3):
 - (1) Reports shall be submitted no later than <u>March 1</u> and <u>September 1</u> of each calendar year.
 - (2) The semiannual reports shall include the information required by Condition V.B, a statement of whether the facility was in compliance or noncompliance, and, if the facility was in noncompliance, the measures taken to bring the facility into compliance.
 - b. The permittee, when required to provide a written notification by Condition V.A.2.I.(4) for exceedance of a baseline level [40 CFR 63.803(1)(4)], shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred.

Copies of reports shall be submitted to the U.S. Environmental Protection Agency and VA DEQ at the addresses given in Condition V.E.1. (9 VAC 5-170-160, 9 VAC 5-80-110, and 40 CFR 63.807 & 63.10(d))

---- End of selected 40 CFR 63 Subpart JJ wood furniture MACT Conditions ----

VI. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (5-80-720 C)
Gluing (except contact adhesive)	Gluing (except the Contact Adhesive operation).	9 VAC 5- 80-720 B,C	VOC (less than 5 tpy)	Includes up to 2 million Btu/hr capacity natural gas heat per hot plate glue press.
Maintenance Parts Washers	Maintenance Parts Washers that do not use halogenated solvents.	9 VAC 5- 80-720 A,B	VOC (less than 5 tpy)	
Fire Pumps	1 Emergency Diesel Fire Pump	9 VAC 5- 80-720 C		One 190 hp.
Vacuum Pump Room	Vacuum Pump Room	9 VAC 5- 80-720 A,B	VOC (less than 5 tpy)	
Facility Air Compressors	Powered by electric motors.	9 VAC 5- 80-720 A	VOC (less than 5 tpy)	
Misc Storage Tanks	15 AST Tanks - finishing materials 1 AST Tank - gasoline 1 AST Tank - diesel 1 AST Tank - #2 fuel oil 1 AST Tank - used oil	9 VAC 5- 80-720 B	VOC (less than 5 tpy)	Capacity of each tank is less than 10,000 gal (most are much smaller).

These insignificant emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

VII. Compliance Plan: NA

VIII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of applicability	
40 CFR 60 Subpart Dc	NSPS Dc for 10-100 million Btu/hr Steam Generating Units	Erie City boiler B1, 37 million Btu/hr wood/ #2 F.O., was installed several years before the 1989 NSPS applicability date.	
40 CFR 60 Subpart Db	NSPS Db for 100-250 million Btu/hr Steam Generating Units	Union Iron Works boiler B2, 110 Btu/hr wood/coal, was installed several years before the 1984 NSPS applicability date.	
40 CFR 63 Subpart JJ	MACT JJ, Wood Furniture Manufacturing MACT (as it pertains to gluing)	Gluing except contact adhesive operation. Except for the small contact adhesive operation, all the rest of Gluing throughput the facility does not use the MACT gluing process.	
40 CFR 60 Subpart Kb	NSPS Kb for storage tank.	All storage tanks have a capacity of less than 40 cubic meters (10,568 gal) applicability size; also most or all were installed before 1984 applicability date.	

Nothing in this permit shield shall alter the provisions of § 303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to § 114 of the federal Clean Air Act, (ii) the Board pursuant to § 10.1-1314 or § 10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to § 10.1-1307.3 of the Virginia Air Pollution Control Law. (9 VAC 5-80-140)

IX. General Conditions

A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the effective date. Unless a timely and complete renewal application consistent, with 9 VAC 5-80-80, has been submitted, to the West Central Regional Office of the DEQ, by the owner, the right of the facility to operate shall be terminated upon permit expiration.

- 1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- 2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
- 3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- 4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- 5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

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C. Recordkeeping and Reporting

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - a. The date, place as defined in the permit, and time of sampling or measurements.
 - b. The date(s) analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses.
 - f. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

- 2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

 (9 VAC 5-80-110 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than <u>March 1</u> and <u>September 1</u> of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G. Note that much of the recordkeeping required by this permit also serves as required periodic monitoring to determine emissions compliance and therefore needs to be addressed in the periodic reports. The details of the reports are to be arranged with the Director, West Central Regional Office. The reports shall include:
 - a. The time period included in the report. The time periods to be addressed are July 1 to December 31 and January 1 to June 30.
 - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (1) exceedance of emissions limitations or operational restrictions;

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- (2) excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or
- (3) failure to meet monitoring, record-keeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual period."
- d. These Title V semi-annual reports shall be sent to the following address:

VA DEQ Director, West Central Regional Office ATTN: Air Compliance Manager 3019 Peters Creek Road Roanoke, VA 24019

(9 VAC 5-80-110 F)

D. Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than **March 1** each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to § 114(a)(3) and § 504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- 6. Such other facts as the permit may require to determine the compliance status of the source.

This Title V annual compliance certification shall be sent to the following addresses:

U.S. EPA, Region III Clean Air Act Title V Compliance Certification (3AP00) 1650 Arch Street Philadelphia, PA 19103-2029.

VA DEQ Director, West Central Regional Office Attn: Air Compliance Manager 3019 Peters Creek Road Roanoke, VA 24019

(9 VAC 5-80-110 K.5)

E. Permit Deviation Reporting

The permittee shall notify the Director, West Central Regional Office, within four (4) daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the occurrence, the permittee shall provide a written statement explaining the problem, any corrective actions or preventive measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report required by this permit.

(9 VAC 5-80-110 F.2, 9 VAC 5-80-250)

F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after a deviation is discovered from permit requirements, notify the Director, West Central Regional Office, by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within two weeks provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, West Central Regional Office.

(9 VAC 5-20-180 C, 9 VAC 5-80-250)

G. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (9 VAC 5-50-20, 9 VAC 5-40-20)

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H. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the conditions of paragraph 2 are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the board of the malfunction within two working days following the time when the emissions limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, telegraph, or any other method that allows the permittee to comply with the deadline. The notice fulfills the requirement of 9 VAC 5-80-110 F.2. b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirements under 9 VAC 5-20-180 C.
- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.

 (9 VAC 5-80-250)

I. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited, to the following:

- 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- 2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and
- 5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90, 9 VAC 5-50-90)

J. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

K. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

L. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

M. Permit Action for Cause

- 1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause as specified in 9 VAC 5-80-110 L, 9 VAC 5-80-240 and 9 VAC 5-80-260. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
 - (9 VAC 5-80-110 G & L, 9 VAC 5-80-240, 9 VAC 5-80-260)
- 2. Such changes that may require a permit modification and/or revisions include, but are not limited to, the following:
 - a. Erection, fabrication, installation, addition, or modification of an emissions unit (which is the source, or part of it, which emits or has the potential to emit any regulated air pollutant), or of a source, where there is, or there is the potential of, a resulting emissions increase;
 - b. Reconstruction or replacement of any emissions unit or components thereof such that its capital cost exceeds 50% of the cost of a whole new unit;
 - c. Any change at a source which causes emission of a pollutant not previously emitted, an increase in emissions, production, throughput, hours of operation, or fuel use greater than those allowed by the permit, or by 9 VAC 5-80-11, unless such an increase is authorized by an emission cap; or any change at a source which causes an increase in emissions resulting from a reduction in control efficiency, unless such an increase is authorized by an emissions cap;
 - d. Any reduction of the height of a stack or of a point of emissions, or the addition of any obstruction which hinders the vertical motion of exhaust;
 - e. Any change at the source which affects its compliance with conditions in this permit, including conditions relating to monitoring, recordkeeping, and reporting;
 - f. Addition of an emissions unit which qualifies as insignificant by emissions rate (9 VAC 5-80-720 B) or by size or production rate (9 VAC 5-80-720 C);
 - g. Any change in insignificant activities, as defined by 9 VAC 5-80-90 D.1.a(1) and by 9 VAC 5-80-720 B and 9 VAC 5-80-720 C.

(9 VAC 5-80-110 G, 9 VAC 5-80-110 J, 9 VAC 5-80-240, and 9 VAC 5-80-260)

N. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

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O. Duty to Submit Information

- 1. The permittee shall furnish to the board, within a reasonable time, any information that the board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the board along with a claim of confidentiality. (9 VAC 5-80-110 G.6)
- 2. Any document (including reports) required in a permit condition to be submitted to the board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G. (9 VAC 5-80-110 K.1)

P. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. (9 VAC 5-80-110 H, 9 VAC 5-80-340 C.)

Q. Alternative Operating Scenarios

NA

R. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

S. Reopening For Cause

The permit shall be reopened by the board if additional federal requirements become applicable to a major source with a remaining permit term of three or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

- 1. The permit shall be reopened if the board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 2. The permit shall be reopened if the administrator or the board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 3. The permit shall not be reopened by the board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

T. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

U. Transfer of Permits

- No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-160)
- 2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

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3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The board may suspend, under such conditions and for such period of time as the board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations. (9 VAC 5-80-260)

W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substance subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A - F)

Y. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68. (40 CFR Part 68)

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Z. Changes to Permits for Emissions Trading

No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-110 except subsection N shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

X. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

- 1. Odor.... Not Applicable in this Title V permit.
- 2. State toxics rule....Not Applicable in this Title V permit. There were no state toxics conditions to roll over into the Title V permit from any applicable NSR permit.
- 3. Other....Not Applicable in this Title V permit.

(9 VAC 5-80-110 N, 9 VAC 5-80-300)

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